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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,619	03/16/2004	Yo-Shen Lin	CMDP0008USA	2618
27765	7590	08/15/2005	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION			HAM, SEUNGSOOK	
P.O. BOX 506			ART UNIT	
MERRIFIELD, VA 22116			PAPER NUMBER	
			2817	

DATE MAILED: 08/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/708,619

Applicant(s)

LIN ET AL.

Examiner

Seungsook Ham

Art Unit

2817

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,9-12 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4 and 9-12 is/are allowed.
- 6) ☒ Claim(s) 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification does not provide enough detail such that one skilled in the art would know how to make the invention as recited in claim 14. Although the specification discloses the step of "adjusting a mutual inductance to a designed positive value according to appropriate shapes of inductors", the specification does not describe how the steps, "widening an applicable frequency range of the lumped-element transmission line" and "determining the mutual inductance according to frequency a response of the transmission line" are performed in conjunction with the step, "adjusting a mutual inductance...inductors."

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 14, "widening an applicable frequency range of the lumped-element transmission line" is vague and indefinite. It should be noted that the term "widening" is a relative term which renders the claim indefinite. The term "widening" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Moreover, "according to frequency a response of the transmission line" is cannot be understood. Is it mean, --according to a frequency response of the lumped-element transmission line--? Furthermore, "adjusting a mutual inductance..." and "determining the mutual inductance..." is confusing as to how one determines the mutual inductance after the step of "adjusting a mutual inductance." It is unclear as to how these steps are related to each other.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida et al. (US '689), or Tomaru (JP '180) in view of Matsumura et al. (US '686, insofar as understood).

Uchida et al. (figs. 1A-4) discloses a lumped-element transmission line comprising: widening an applicable frequency range of the lumped-element transmission line L1, L2 (col. 11, lines 32-35, "the operational range of the LC filter is

greatly increased"); adjusting a mutual inductance to a designed positive value (col. 5, lines 44-65); and determining the mutual inductance according to a frequency response of the transmission line (col. 6, line 63 – col. 7, line 11).

Tomaru (figs. 1A-2C) also discloses a lumped-element transmission line comprising: widening an applicable frequency range of the lumped-element transmission line 14, 16 (compared figure 8B, prior art with figures 2B-3B, and paragraphs [0027]-[0030]); adjusting a mutual inductance to a designed positive value (paragraphs [0022]-[0025], see also fig. 1B, the coils 14 and 16 are wound in a same direction); and determining the mutual inductance according to a frequency response of the transmission line (paragraphs [0027]-[0028]).

Uchida et al. and Tomaru do not show adjusting the mutual inductance by appropriate shapes of inductors. It should be noted that changing the shape of an inductor changes the inductance value.

Matsumura et al. (figs. 1-9D) discloses a lumped-element transmission line having a mutual inductance M (fig. 4). Matsumura et al. (figs 5A-5J and 9A-9D) also teaches that the shapes of the inductors can be varied. It should be noted that the change of the shape of the inductors changes the inductance value, which causes the changes in the mutual inductance.

It would have been obvious to one of ordinary skill in the art to adjust the mutual inductance by providing appropriate shapes of inductors in the device of Uchida et al. or Tomaru to provide a small size filter or to increase Q factor of the device as taught by Matsumura et al. (see abstract).

Allowable Subject Matter

Claims 1-4 and 9-12 are allowed.

Response to Arguments

Applicant's arguments with respect to claim 14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seungsook Ham whose telephone number is (571) 272-2405. The examiner can normally be reached on Monday-Thursday, 8:00AM-5:00PM.

Art Unit: 2817

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571)-272-1769. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Seungsook Ham
Primary Examiner
Art Unit 2817

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